

**Amendments to the Claims**

The claims are unamended. The currently pending claims are listed below.

1 - 5. (Cancelled)

1       6.     (Previously Presented) A computer-implemented method for managing access to  
2     computer resources, the method comprising:

3             (a) defining a respective financial valuation of each of a plurality of work items to be  
4     processed by one or more data processing systems;

5             (b) comparing the respective financial valuation of each respective said work item to a  
6     respective cost of accessing additional computer resources necessary to process the work item in a  
7     current time period, said additional computer resources being external to said one or more data  
8     processing systems;

9             (c) with respect to each said work item for which the respective financial valuation of the  
10    work item exceeds the respective cost of accessing additional computer resources necessary to  
11    process the work item in the current time period, dynamically accessing additional computer  
12    resources necessary to process the work item in the current time period;

13            (d) with respect to each said work item for which the respective financial valuation of the  
14    work item does not exceed the respective cost of accessing additional computer resources  
15    necessary to process the work item in the current time period, deferring processing of the work  
16    item to a subsequent time period; and

17            (e) repeating said (b) through (d) in one or more subsequent time periods with respect to  
18    each said work item deferred by said (d) until each said work item has been processed.

1       7.     (Original) The method of claim 6 further comprising applying a valuation heuristic to  
2     each work item.

1       8.       (Original) The method of claim 6 further comprising applying a priority algorithm for  
2       preventing starvation of computer resources to those work items which have been delayed,  
3       whereby the processing of all the work items in a program is completed.

1       9.       (Original) The method of claim 7 further comprising having the priority algorithm  
2       increase respective valuations of delayed work items so as to complete processing of each of the  
3       work items prior to or at a cut-off processing date of the work item.

10 - 22. (Cancelled)

1 23. (Previously Presented) A method of providing fee-based processing for programs in a  
2 processor system, whereby fees are based on utilization of computer resources for completing  
3 processing a program, the processor system including at least one processor; a memory coupled to  
4 the at least one processor, and a scheduling manager residing in the memory, the method  
5 comprising the steps of:

6 (a) defining a respective financial valuation of each of a plurality of programs to be  
7 processed;

8 (b) comparing the respective financial valuation of each respective said program to a  
9 respective projected fee for utilization of computer resources to process said program in a current  
10 time period;

11 (c) with respect to each said program for which the respective financial valuation of the  
12 program exceeds the respective projected fee for utilization of computer resources to process the  
13 program in the current time period, dynamically accessing computer resources to be applied to  
14 process the program in the current time period;

15 (d) with respect to each said program for which the respective financial valuation of the  
16 program does not exceed the respective projected fee for utilization of computer resources to  
17 process the program in the current time period, deferring processing of the program to a  
18 subsequent time period; and

19 (e) repeating said (b) through (d) in one or more subsequent time periods with respect to  
20 each said program deferred by said (d) until each said program has been processed; and

21 (f) assessing a fee for the dynamically accessed computer resources to be used.

1 24. (Original) The method of claim 23 further comprising applying a valuation heuristic to  
2 each work item for establishing the valuation of each work item.

1 25. (Original) The method of claim 24 further comprising applying a priority algorithm for  
2 preventing starvation of computer resources to those work items which have been delayed,  
3 whereby the processing of all the work items in a program is completed.

1 26. (Original) The method of claim 25 wherein the dynamic determination is based on  
2 different attributes of the one or more work items forming at least part of a program.

27. (Cancelled)

1 28. (Previously Presented) The method of claim 6, wherein said method is used in a  
2 networked environment including a grid of computing resources, and a request manager of the  
3 grid to receive requests of one or more customers for utilization of computing resources of the  
4 grid; wherein said additional computer resources comprise computing resources of said grid of  
5 computing resources; wherein one or more computer systems of a customer is coupled to the  
6 request manager and include one or more processors; a memory coupled to at least the one  
7 processor; and, a scheduling manager residing in the memory and executable by the at least the  
8 one processor.

1       29.     (Previously Presented) A data processing apparatus comprising:  
2             at least one processor;  
3             a memory coupled to the at least one processor; and  
4             a scheduling manager residing in the memory and executable on the at least one processor,  
5     the scheduling manager dynamically managing access of each of a plurality of work items to  
6     additional computer resources external to said data processing apparatus for processing the  
7     respective work item, each said work item being a respective item of work performable by a data  
8     processing system and having a respective financial valuation;  
9             wherein said scheduling manager, in each of a plurality of time periods, compares the  
10    respective financial valuation of each unprocessed work item to a respective cost of accessing said  
11    additional computer resources to process the work item in the respective time period, and with  
12    respect to each said work item for which the respective financial valuation exceeds the respective  
13    cost of accessing the additional computer resources to process the work item in the respective  
14    time period, dynamically accesses the additional computer resources to process the work item in  
15    the respective time period; and with respect to each said work item for which the respective  
16    financial valuation does not exceed the respective cost of accessing the additional computer  
17    resources to process the work item in the respective time period, defers processing of the work  
18    time to a subsequent time period.

1       30.     (Previously Presented) The apparatus of claim 29 wherein the scheduling manager  
2             applies a valuation heuristic to each work item.

1       31.     (Previously Presented) The apparatus of claim 29 wherein the scheduling manager  
2             applies a priority algorithm for preventing starvation of computer resources to those work items  
3             which have been deferred, whereby the processing of all the work items is completed.

1 32. (Previously Presented) The apparatus of claim 31 wherein the priority algorithm  
2 increases respective valuations of delayed work items so as to complete processing of each of the  
3 work items prior to or at a cut-off processing date of the work item.

1 33. (Previously Presented) A program product comprising:  
2 a scheduling manager embodied as a plurality of computer-executable instructions  
3 recorded on a computer-readable storage medium, wherein said scheduling manager, when  
4 executed by a computer system, causes the computer system to:  
5 (a) compare a respective defined financial valuation of each of a plurality of work items to  
6 be processed by the computer system to a respective cost of accessing additional computer  
7 resources necessary to process the work item in a current time period, said additional computer  
8 resources being external to said computer system;  
9 (b) with respect to each said work item for which the respective financial valuation of the  
10 work item exceeds the respective cost of accessing additional computer resources necessary to  
11 process the work item in the current time period, dynamically accesses additional computer  
12 resources necessary to process the work item in the current time period;  
13 (c) with respect to each said work item for which the respective financial valuation of the  
14 work item does not exceed the respective cost of accessing additional computer resources  
15 necessary to process the work item in the current time period, defers processing of the work item  
16 to a subsequent time period; and  
17 (d) repeats said (a) through (c) in one or more subsequent time periods with respect to  
18 each said work item deferred by said (c) until each said work item has been processed.

1 34. (Previously Presented) The program product of claim 33 wherein the scheduling manager  
2 applies a valuation heuristic to each work item to establish a valuation for each of the work items.

1     35.     (Previously Presented) The program product of claim 33 wherein the scheduling manager  
2     applies a priority algorithm for preventing starvation of computer resources to those work items  
3     which have been delayed, whereby the processing of all the work items in a program will be  
4     completed.

1     36.     (Previously Presented) The program product of claim 35 wherein the priority algorithm  
2     increases respective valuations of delayed work items so as to complete processing of each of the  
3     work items prior to or at a cut-off processing date of the work item.

1 37. (Previously Presented) A networked environment, comprising:  
2 a grid of computing resources;  
3 a request manager of the grid to receive requests of one or more customers for utilization  
4 of computing resources of the grid;  
5 one or more computer systems of a customer coupled to the request manager; the one  
6 computer system comprising one or more processors;  
7 a memory coupled to at least the one processor of the one computer system; and,  
8 a scheduling manager residing in the memory and executable on the at least one processor,  
9 the scheduling manager dynamically managing access of each of a plurality of work items to  
10 additional computer resources external to said one or more computer systems of a customer for  
11 processing the respective work item, each said work item being an item of work performable by a  
12 data processing system and having a respective financial valuation;  
13 wherein said scheduling manager, in each of a plurality of time periods, compares the  
14 respective financial valuation of each unprocessed work item to a respective cost of accessing said  
15 additional computer resources to process the work item in the respective time period, and with  
16 respect to each said work item for which the respective financial valuation exceeds the respective  
17 cost of accessing the additional computer resources to process the work item in the respective  
18 time period, dynamically accesses the additional computer resources to process the work item in  
19 the respective time period; and with respect to each said work item for which the respective  
20 financial valuation does not exceed the respective cost of accessing the additional computer  
21 resources to process the work item in the respective time period, defers processing of the work  
22 time to a subsequent time period.

1 38. (Previously Presented) The environment of claim 37 wherein the scheduling manager  
2 applies a valuation heuristic to each work item.



1       39.     (Previously Presented) The environment of claim 37 wherein the scheduling manager  
2       applies a priority algorithm for preventing starvation of computer resources to those work items  
3       which have been delayed, whereby the processing of all the work items in a program is  
4       completed.

1       40.     (Previously Presented) The environment of claim 39 wherein the scheduling manager  
2       increases respective valuations of delayed work items so as to complete processing of each of the  
3       work items prior to or at a cut-off processing date of the work item.

1 41. (Previously Presented) A computer-implemented method for managing access to  
2 computer resources, the method comprising:

3 (a) providing a plurality of work items for processing by one or more data processing  
4 systems in a current time period, each work item having a respective financial valuation;

5 (b) selecting a first subset of said plurality of work items for processing by a first data  
6 processing system in the current time period according to said financial valuations;

7 (c) with respect to each said work item not included in said first subset, comparing the  
8 respective financial valuation of the work item to a respective cost of accessing additional  
9 computer resources external to said first data processing system to process the work item in the  
10 current time period;

11 (d) with respect to each said work item not included in said first subset for which the  
12 respective financial valuation of the work item exceeds the respective cost of accessing additional  
13 computer resources external to said first data processing system to process the work item in the  
14 current time period, dynamically accessing additional computer resources external to said first  
15 data processing system to process the work item in the current time period;

16 (e) with respect to each said work item not included in said first subset for which the  
17 respective financial valuation of the work item does not exceed the respective cost of accessing  
18 additional computer resources external to said first data processing system to process the work  
19 item in the current time period, deferring processing of the work item to a subsequent time period;  
20 and

21 (f) repeating said (a) through (e) in multiple time periods, wherein any work item deferred  
22 by (e) is included in the plurality of work items of each subsequent time period until the work  
23 item is processed, and wherein for at least some time periods, the first subset of the respective  
24 plurality of work items includes fewer than all of the respective plurality of work items.

1     42.     (Previously Presented) The method of claim 41 further comprising applying a priority  
2     algorithm for preventing starvation of computer resources to those work items which have been  
3     deferred, whereby the processing of all the work items is completed.

1     43.     (Previously Presented) The method of claim 41, wherein said method is used in a  
2     networked environment including a grid of computing resources, and a request manager of the  
3     grid to receive requests of one or more customers for utilization of computing resources of the  
4     grid; wherein said additional computer resources comprise computing resources of said grid of  
5     computing resources.